

NATIONAL TRANSPORTATION SAFETY BOARD  
DEPARTMENT OF TRANSPORTATION  
WASHINGTON, D. C. 20591

NOV 4 1968

A-68-31

Mr. David D. Thomas  
Acting Administrator  
Federal Aviation Administration  
Department of Transportation  
Washington, D. C. 20590

Dear Mr. Thomas:

During the course of the Board's investigation of an accident involving American Airlines Flight 290, a Boeing 727-100 series aircraft, at Springfield, Illinois, September 23, 1968, certain aspects relating to the emergency evacuation of the aircraft have shown a need for safety attention.

The flight had made an unscheduled landing because of a report that eight sticks of dynamite were aboard. Subsequent to landing, an emergency evacuation was made; however, the stewardesses were unable to hook the retainer bar of the inflatable slide to the floor at the emergency galley service exit. For this reason, this exit was not used during the evacuation. It would appear that the insertion of the retainer bar under less trying conditions would insure the correct positioning of this bar and accelerate availability of the slide, as well as eliminate the possibility of a malfunction under actual emergency conditions. A requirement for insertion of the bar prior to the aircraft's departure from the ramp area would increase the chances for usability of the slide when needed.

The investigation revealed that the only injuries which occurred during the evacuation of the aircraft resulted when passengers jumped from the leading edge of the wings to the ground. An examination of the air carrier's printed cards used to supplement the oral briefing of passengers, required by Section 121.571(b) of Part 121 of the Federal Aviation Regulations, disclosed the absence of any reference to direction of departure from the wing whenever over-the-wing exits are used as a means of evacuation. The inclusion of directional guidance information on this card would direct the passengers to an exit point on the wing where the chances of injury would be minimized.

The investigation also revealed that the ventral stairs were not used during the evacuation of the aircraft even though they were in operable condition. For this reason, it would be advisable for all air carrier flightcrew personnel to review the basic philosophy behind any

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evacuation. For example, the air carrier involved in the reference accident has incorporated into their operations manual the following: "---- to use all cabin exits that are not jammed, blocked by fire, or otherwise rendered unusable."

In view of the above, the Board submits the following recommendations:

1. All air carriers be required to have the retainer bar for all door-mounted slides placed in position for slide deployment at the floor-level emergency exits prior to the aircraft's departure from the ramp for flight. This bar should not be removed until the aircraft is parked at the ramp. This is recommended as an interim measure, since it is recognized that the presently effective provisions of Section 25.809(f)(1) of Part 25 of the Federal Aviation Regulations which provide for automatic deployment of slides at all floor-level exits will be retroactively applied to all passenger-carrying aircraft after September 30, 1969, by the provisions of Section 121.310(a)(2) of Part 121.
2. FAA inspectors review all printed cards used by the air carriers to supplement the oral briefing to ensure that they include clear instructions showing the direction passengers should take upon leaving the wing whenever over-the-wing exits are used for evacuating the aircraft.
3. All air carriers re-emphasize, through their crew training programs, the basic philosophy of emergency evacuation that all cabin exits that are not jammed, blocked by fire, or otherwise rendered unusable (including ventral stairs) should be used to the extent reasonably possible.

Our personnel have discussed the aforementioned problem areas with representatives of your Flight Standards Service.

Our Bureau of Aviation Safety is available to provide you with additional information or assistance.

Sincerely yours,

Original signed by

Joseph J. O'Connell, Jr.

Joseph J. O'Connell, Jr.  
Chairman